

1 WHAT IS CLAIMED IS:

5 1. A purchased commodity accommodating and  
transporting apparatus having a self scanning function,  
comprising:

a commodity code reading section for reading a  
commodity code applied to a commodity;

10 an accommodation section for accommodating  
therein a commodity whose commodity code has been read  
by said commodity code reading section;

a weighing equipment for measuring the total  
weight of commodities accommodated in said accommodation  
section;

15 a weight determination section for detecting the  
variation of the total weight of the commodities in said  
accommodation section measured by said weighing  
equipment; and

20 an alarm generation section for generating an  
alarm when it is determined by said weight determination  
section that the total weight of the commodities in said  
accommodation section measured by said weighing  
equipment has changed without reading a commodity code  
by said commodity code reading section.

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2. The purchased commodity accommodating and

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1 transporting apparatus having a self scanning function  
as claimed in claim 1, further comprising an alarm  
cancellation section for cancelling the alarm generated  
from said alarm generation section when it is determined  
5 by said weight determination section that the total  
weight of the commodities in said accommodation section,  
which changed without reading a commodity code by said  
commodity code reading section, has returned to its  
original weight before the change.

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3. A POS system, comprising:

a plurality of purchased commodity accommodating  
and transporting apparatus having a self scanning  
15 function and each including a commodity code reading  
section for reading a commodity code applied to a  
commodity, and an accommodation section for  
accommodating therein a commodity whose commodity code  
has been read by said commodity code reading section;  
20 and

a management section for managing said purchased  
commodity accommodating and transporting apparatus;

each of said purchased commodity accommodating  
and transporting apparatus including:

25 a weighing equipment for measuring the total  
weight of commodities accommodated in said accommodation  
section;

1           a weight determination section for detecting the  
variation of the total weight of the commodities in said  
accommodation section measured by said weighing  
equipment;

5           an alarm generation section for generating an  
alarm when it is determined by said weight determination  
section that the total weight of the commodities in said  
accommodation section measured by said weighing  
equipment has changed without reading a commodity code  
10 by said commodity code reading section;

          a timer for counting an alarm generation time by  
said alarm generation section;

          a timer determination section for determining  
whether or not the counted time by said timer reaches a  
15 predetermined time; and

          an error transmission section for transmitting,  
when it is determined by said timer determination  
section that the counted time by said timer has reached  
the predetermined time, unique information of the  
20 purchased commodity accommodating and transporting  
apparatus as error information to said management  
section.

25           4. The POS system as claimed in claim 3,  
wherein said management section includes an error  
reception section for receiving the error information

1 from said error transmission section of any of said  
purchased commodity accommodating and transporting  
apparatus, an error display section for displaying, when  
the error information is received by said error  
5 reception section, the unique information of one of said  
purchased commodity accommodating and transporting  
apparatus from which the error information has been  
transmitted, and an error cancellation section for  
cancelling the display of the unique information of the  
10 one purchased commodity accommodating and transporting  
apparatus on said error display section when a  
countermeasure for the one purchased commodity  
accommodating and transporting apparatus, from which the  
error information has been transmitted, is completed.

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5. A purchased commodity accommodating and  
transporting apparatus having a self scanning function,  
comprising:

20 a commodity code reading section for reading a  
commodity code applied to a commodity;

an accommodation section for accommodating  
therein a commodity whose commodity code has been read  
by said commodity code reading section;

25 a weighing equipment for measuring the total  
weight of commodities accommodated in said accommodation  
section;

1           a commodity weight retrieval section for  
retrieving the weight of a commodity in accordance with  
the commodity code information read by said commodity  
code reading section;

5           a weight comparison section for comparing the  
weight of the commodity retrieved by said commodity  
weight retrieval section and the increment of the total  
weight of the commodities in said accommodation section  
after reading of the commodity code information measured  
10 by said weighing equipment; and

          an alarm generation section for generating an  
alarm when it is determined by said weight comparison  
section that the weight of the commodity retrieved by  
said commodity weight retrieval section and the  
15 increment of the total weight of the commodities in said  
accommodation section after reading of the commodity  
code measured by said weighing equipment are different  
from each other.

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6. The purchased commodity accommodating and  
transporting apparatus having a self scanning function  
as claimed in claim 5, further comprising a weight  
determination section for detecting the variation of the  
25 total weight of the commodities in said accommodation  
section measured by said weighing equipment, and wherein  
said alarm generation section generates an alarm when it

1 is determined by said weight determination section that  
the total weight of the commodities in said  
accommodation section measured by said weighing  
equipment has changed without reading a commodity code  
5 by said commodity code reading section.

7. A POS system, comprising:

a plurality of purchased commodity accommodating  
10 and transporting apparatus having a self scanning  
function and each including a commodity code reading  
section for reading a commodity code applied to a  
commodity, a commodity code registration section for  
registering the commodity code information read by said  
15 commodity code reading section, and an accommodation  
section for accommodating therein a commodity whose  
commodity code has been read by said commodity code  
reading section;

a commodity information file for storing price  
20 information of commodities corresponding to the  
commodity code information as commodity information; and

a settlement POS terminal for retrieving said  
commodity information file in accordance with the  
commodity code information registered in said commodity  
25 code registration section of any of said purchased  
commodity accommodating and transporting apparatus to  
perform final settlement of accounts for purchased

1 commodities accommodated in said accommodation section  
of the purchased commodity accommodating and  
transporting apparatus;

said commodity information file storing weight  
5 information of individual commodities corresponding to  
the commodity code information as commodity information;

each of said purchased commodity accommodating  
and transporting apparatus including:

a weighing equipment for measuring the total  
10 weight of commodities accommodated in said accommodation  
section; and

a data transmission section for transmitting,  
upon settlement of accounts at said settlement POS  
terminal, the total weight of the commodities in said  
15 accommodation section measured by said weighing  
equipment to said settlement POS terminal;

said settlement POS terminal including:

a data reception section for receiving data from  
said data transmission section of any of said purchased  
20 commodity accommodating and transporting apparatus;

a commodity weight retrieval section for  
retrieving the weights of the commodities corresponding  
to the commodity code information from said commodity  
information file in accordance with the commodity code  
25 information of all commodities registered by said  
commodity code registration section;

a total weight calculation section for

1 calculating the total weight of the weights of the  
commodities retrieved by said commodity weight retrieval  
section;

5 a weight comparison section for comparing the  
total weight calculated by said total weight calculation  
section and the total weight of the commodities in said  
accommodation section received by said data reception  
section; and

10 an alarm generation section for generating an  
alarm when it is determined by said weight comparison  
section that the total weight calculated by said total  
weight calculation section and the total weight of the  
commodities in said accommodation section received by  
said data reception section are different from each  
15 other.

8. The POS system as claimed in claim 7,  
wherein each of said purchased commodity accommodating  
20 and transporting apparatus includes a weight  
determination section for detecting the variation of the  
total weight of the commodities in said accommodation  
section measured by said weighing equipment; and an  
alarm generation section for generating an alarm when it  
25 is determined by said weight determination section that  
the total weight of the commodities in said  
accommodation section measured by said weighing



1 equipment has changed without reading a commodity code  
by said commodity code reading section.

5 9. A purchased commodity accommodating and  
transporting apparatus having a self scanning function,  
comprising:

a commodity code reading section for reading a  
commodity code applied to a commodity;

10 a commodity code registration section for  
registering the commodity code information read by said  
commodity code reading section;

an accommodation section for accommodating  
therein a commodity whose commodity code has been read  
15 by said commodity code reading section;

said commodity code reading section being used  
to read, upon settlement of accounts, the commodity code  
of a commodity selected at random from the commodities  
accommodated in said accommodation section;

20 a commodity registration determination section  
for determining whether or not the commodity code  
information read by said commodity code reading section  
upon settlement of accounts is registered in said  
commodity code registration section; and

25 an error notification section for notifying an  
error when it is determined by said commodity  
registration determination section upon settlement of

1 accounts that the commodity code information read by  
said commodity code reading section is not registered.

5 10. A purchased commodity accommodating and  
transporting apparatus having a self scanning function,  
comprising:

a commodity code reading section for reading a  
commodity code applied to a commodity;

10 a commodity code registration section for  
registering the commodity code information read by said  
commodity code reading section;

15 an accommodation section for accommodating  
therein a commodity whose commodity code has been read  
by said commodity code reading section; and

said commodity code reading section being used  
to read, upon settlement of accounts, the commodity code  
of a commodity selected at random from the commodities  
accommodated in said accommodation section;

20 a commodity registration determination section  
for determining whether or not the commodity code  
information read by said commodity code reading section  
upon settlement of accounts is registered in said  
commodity code registration section;

25 said commodity code registration section  
automatically registering the commodity code information  
read by said commodity code reading section when it is

1 determined upon settlement of accounts by said commodity  
registration determination section that the commodity  
code information is not registered.

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11. The purchased commodity accommodating and  
transporting apparatus having a self scanning function  
as claimed in claim 10, further comprising an error  
notification section for notifying an error when it is  
10 determined upon settlement of accounts by said commodity  
registration determination section that the commodity  
code information read by said commodity code reading  
section is not registered.

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12. A POS system, comprising:  
a plurality of purchased commodity accommodating  
and transporting apparatus having a self scanning  
function and each including a commodity code reading  
20 section for reading a commodity code applied to a  
commodity, a commodity code registration section for  
registering the commodity code information read by said  
commodity code reading section, and an accommodation  
section for accommodating therein a commodity whose  
25 commodity code has been read by said commodity code  
reading section; and  
a settlement POS terminal for performing final

1 settlement of accounts for purchased commodities  
accommodated in said accommodation section of any of  
said purchased commodity accommodating and transporting  
apparatus in accordance with the commodity code  
5 information registered in said commodity code  
registration section of the purchased commodity  
accommodating and transporting apparatus;

said settlement POS terminal including:

10 a resonance tag detection section for detecting  
a resonance tag applied in advance to each commodity to  
detect the number of the commodities accommodated in  
said accommodation section of any of said purchased  
commodity accommodating and transporting apparatus; and

15 a commodity number comparison section for  
comparing the number of the commodities detected by said  
resonance tag detection section and the number of  
registered commodities obtained in accordance with the  
commodity code information registered by said commodity  
code registration section.

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13. A purchased commodity accommodating and  
transporting apparatus having a self scanning function,  
comprising:

25 a commodity code reading section for reading a  
commodity code applied to a commodity;

an accommodation section for accommodating

1 therein a commodity whose commodity code has been read  
by said commodity code reading section;

5 a prepaid card inputting processing section for  
receiving a prepaid card and reading remains information  
of the prepaid card;

a commodity price retrieval section for  
retrieving the price of the commodity in accordance with  
the commodity code information read by said commodity  
code reading section; and

10 a data updating section for registering a result  
obtained by subtraction of the price of the commodity  
retrieved by said commodity price retrieval section from  
the remains information read by said prepaid card  
inputting processing section as remains information of  
15 the prepaid card to update the remains information.

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14. The purchased commodity accommodating and  
transporting apparatus having a self scanning function  
20 as claimed in claim 13, further comprising a  
notification section for notifying, when the remains  
read by said prepaid card inputting processing section  
runs short of the price of the commodity retrieved by  
said commodity price retrieval section, such shortage.

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15. The purchased commodity accommodating and

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B 1 transporting apparatus having a self scanning function  
as claimed in claim 14, further comprising a selection  
section for selecting, when the remains read by said  
prepaid card inputting processing section runs short of  
5 the price of the commodity retrieved by said commodity  
price retrieval section, whether the purchasing  
processing is to be continued <sup>by</sup> inserting a second prepaid  
card into said prepaid card inputting processing section  
or the purchasing processing is to be ended.

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16. The purchased commodity accommodating and  
transporting apparatus having a self scanning function  
as claimed in claim 13, further comprising a receipt  
15 issuance section for issuing a receipt upon completion  
of the purchasing.

20 17. The purchased commodity accommodating and  
transporting apparatus having a self scanning function  
as claimed in claim 14, further comprising a receipt  
issuance section for issuing a receipt upon completion  
of the purchasing.

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18. The purchased commodity accommodating and  
transporting apparatus having a self scanning function

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1 as claimed in claim 15, further comprising a receipt  
issuance section for issuing a receipt upon completion  
of the purchasing.

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19. The purchased commodity accommodating and  
transporting apparatus having a self scanning function  
as claimed in claim 16, further comprising a receipt  
issuance selection section for selecting whether the  
10 issuance of a receipt by said receipt issuance section  
is necessary or unnecessary.

20. The purchased commodity accommodating and  
15 transporting apparatus having a self scanning function  
as claimed in claim 17, further comprising a receipt  
issuance selection section for selecting whether the  
issuance of a receipt by said receipt issuance section  
is necessary or unnecessary.

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21. The purchased commodity accommodating and  
transporting apparatus having a self scanning function  
as claimed in claim 18, further comprising a receipt  
25 issuance selection section for selecting whether the  
issuance of a receipt by said receipt issuance section  
is necessary or unnecessary.

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1 22. A purchased commodity accommodating and transporting apparatus having a self scanning function, comprising:

5 a commodity code reading section for reading a commodity code applied to a commodity;

an accommodation section for accommodating therein a commodity whose commodity code has been read by said commodity code reading section;

10 a magnetic card reading section for receiving a credit card or a bank card and reading magnetic information of the card;

15 a commodity price retrieval section for retrieving the price of the commodity in accordance with the commodity code information read by said commodity code reading section; and

20 an automatic clearing processing section for automatically clearing the amount of money corresponding to the price of the commodity retrieved by said commodity price retrieval section from an account corresponding to the magnetic information of the card read by said magnetic card reading section some other day.

25 23. The purchased commodity accommodating and transporting apparatus having a self scanning function as claimed in claim 22, further comprising a prepaid

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1 card inputting processing section for receiving a  
prepaid card and reading ~~the~~ remains information of the  
prepaid card, and a data updating section for  
registering a result obtained by subtraction of the  
5 price of the commodity retrieved by said commodity price  
retrieval section from the remains information read by  
said prepaid card inputting processing section as  
remains information of the prepaid card to update the  
remains information.

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24. The purchased commodity accommodating and  
transporting apparatus having a self scanning function  
as claimed in any one of claims 13 to 23, further  
15 comprising a data reception section for receiving data  
from a management section, and a power on/off drive  
section for automatically turning the power source  
on/off in response to a power on/off instruction  
received from said management section by way of said  
20 data reception section.

25. The purchased commodity accommodating and  
transporting apparatus having a self scanning function  
25 as claimed in any one of claims 13 to 23, further  
comprising a weighing equipment for measuring the total  
weight of commodities accommodated in said accommodation

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1 section, a weight determination section for detecting  
the variation of the total weight of the commodities in  
said accommodation section measured by said weighing  
equipment, and an alarm generation section for  
5 generating an alarm when it is determined by said weight  
determination section that the total weight of the  
commodities in said accommodation section measured by  
said weighing equipment has changed without reading a  
commodity code by said commodity code reading section.

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26. The purchased commodity accommodating and  
transporting apparatus having a self scanning function  
as claimed in claim 24, further comprising a weighing  
15 equipment for measuring the total weight of commodities  
accommodated in said accommodation section, a weight  
determination section for detecting the variation of the  
total weight of the commodities in said accommodation  
section measured by said weighing equipment, and an  
20 alarm generation section for generating an alarm when it  
is determined by said weight determination section that  
the total weight of the commodities in said  
accommodation section measured by said weighing  
equipment has changed without reading a commodity code  
25 by said commodity code reading section.

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